IN THE CLAIMS

The status of the claims as presently *amended is as follows:*

1. (*Currently Amended*) A method of manufacturing a master disc for transferring a magnetic pattern to a magnetic recording medium, comprising the steps of:

providing a substrate;

forming an SiO_2 film on the surface of the substrate;

forming a photoresist film on and in contact with the SiO_2 film;

patterning the photoresist film corresponding to the predetermined magnetic pattern;

developing the photoresist film to form a photoresist mask for etching the SiO_2 film;

etching the SiO_2 to form~~ing~~ a pattern of SiO_2 film corresponding to [[a]]the predetermined magnetic pattern;

etching the substrate using the patterned SiO_2 film as a mask to form grooves corresponding to the predetermined magnetic pattern;

embedding a soft magnetic film in the grooves; and

removing the patterned SiO_2 film.

2. (*Original*) A method according to claim 1, wherein the substrate is a silicon substrate.

3. (*Original*) A method according to claim 2, wherein the soft magnetic film is formed of cobalt or an alloy of iron (Fe) and cobalt (Co) or an alloy of iron, cobalt, and nickel (Ni).

4. (*Original*) A method according to claim 3, wherein the composition of the alloy is set to satisfy an atomic ratio of Fe: 52 to 72%, Co: 28 to 48%, and Ni: 0 to 3%.

5. (*Currently Amended*) A method according to claim 1, ~~wherein the pattern forming step includes the steps of forming a photoresist film on the SiO_2 film, patterning the photoresist film corresponding to the predetermined magnetic pattern, developing the photoresist film to form a photoresist mask for etching the SiO_2 film, and etching the SiO_2 to form the pattern of SiO_2 film corresponding to the predetermined magnetic pattern, and~~ further including the step of removing the patterned photoresist film before etching the substrate.

6. (*Currently Amended*) A method according to claim 2, ~~wherein the pattern forming step includes the steps of forming a photoresist film on the SiO_2 film, patterning the photoresist film corresponding to the predetermined magnetic pattern, developing the photoresist film to form a~~

~~photoresist mask for etching the SiO_2 film, and etching the SiO_2 to form the pattern of SiO_2 film corresponding to the predetermined magnetic pattern, and~~ further including the step of removing the patterned photoresist film before etching the substrate.

7. (*Currently Amended*) A method according to claim 3, ~~wherein the pattern forming step includes the steps of forming a photoresist film on the SiO_2 film, patterning the photoresist film corresponding to the predetermined magnetic pattern, developing the photoresist film to form a photoresist mask for etching the SiO_2 film, and etching the SiO_2 to form the pattern of SiO_2 film corresponding to the predetermined magnetic pattern, and~~ further including the step of removing the patterned photoresist film before etching the substrate.

8. (*Currently Amended*) A method according to claim 4, ~~wherein the pattern forming step includes the steps of forming a photoresist film on the SiO_2 film, patterning the photoresist film corresponding to the predetermined magnetic pattern, developing the photoresist film to form a photoresist mask for etching the SiO_2 film, and etching the SiO_2 to form the pattern of SiO_2 film corresponding to the predetermined magnetic pattern, and~~ further including the step of removing the patterned photoresist film before etching the substrate.

9. (*Original*) A method according to claim 3, wherein the SiO_2 film having a thickness of 0.2μm is formed on the surface of the substrate by thermal oxidation.

10. (*Original*) A method according to claim 9, wherein the depth of the grooves in the substrate is 0.5μm.

11. (*Original*) A method according to claim 4, wherein the SiO_2 film having a thickness of 0.2μm is formed on the surface of the substrate by thermal oxidation.

12. (*Original*) A method according to claim 11, wherein the depth of the grooves in the substrate is 0.25μm.

13. (*Original*) A master disc formed according to the method of claim 1.

14. (*Original*) A master disc formed according to the method of claim 2

15. (*Original*) A master disc formed according to the method of claim 3.

16. (*Original*) A master disc formed according to the method of claim 4.

17. (*Original*) A master disc formed according to the method of claim 5.

18. (*Currently Amended*) A master disc ~~for transferring a magnetic pattern to a magnetic recording medium, comprising:~~formed according to claim 1,

~~a silicon substrate having grooves corresponding to a magnetic pattern; and~~

~~a magnetic material filling the grooves,~~

~~—~~wherein the magnetic material is formed of an alloy of iron (Fe) and cobalt (Co) or an alloy of iron, cobalt, and nickel (Ni).

19. (*Original*) A master disc according to claim 18, wherein the composition of the alloy satisfies an atomic ratio of Fe: 52 to 72%, Co: 28 to 48%, and Ni: 0 to 3%.

20. (*Original*) A master disc according to claim 19, wherein the grooves are 0.25μm deep.